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TECH CENTER 1600/2900



1600

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/586,937

DATE: 08/21/2002

TIME: 15:04:10

Input Set : A:\50154.003001.SEQLIST.TXT

Output Set: N:\CRF3\08212002\I586937.raw

4 <110> APPLICANT: Hubbell, Jeffrey A.  
 5 Elbert, Donald  
 6 Schoenmakers, Ronald  
 9 <120> TITLE OF INVENTION: CONJUGATE ADDITION REACTIONS FOR THE  
 10 CONTROLLED DELIVERY OF PHARMACEUTICALLY ACTIVE COMPOUNDS  
 13 <130> FILE REFERENCE: 50154/003001  
 15 <140> CURRENT APPLICATION NUMBER: US 09/586,937  
 16 <141> CURRENT FILING DATE: 2000-06-02  
 18 <150> PRIOR APPLICATION NUMBER: US 09/496,231  
 19 <151> PRIOR FILING DATE: 2000-02-01  
 21 <150> PRIOR APPLICATION NUMBER: US 60/118,093  
 22 <151> PRIOR FILING DATE: 1999-02-01  
 24 <160> NUMBER OF SEQ ID NOS: 75  
 26 <170> SOFTWARE: FastSEQ for Windows Version 4.0  
 28 <210> SEQ ID NO: 1  
 29 <211> LENGTH: 10  
 30 <212> TYPE: PRT  
 31 <213> ORGANISM: Artificial Sequence  
 33 <220> FEATURE:  
 34 <223> OTHER INFORMATION: Based on Homo sapiens  
 W--> 36 <221> NAME/KEY: VARIANT  
 37 <222> LOCATION: (1)...(10)  
 38 <223> OTHER INFORMATION: Xaa=any amino acid except Cys  
 W--> 40 <400> 1  
 W--> 41 Tyr Cys Xaa Xaa Xaa Xaa Xaa Cys Tyr  
 42 1 5 10  
 45 <210> SEQ ID NO: 2  
 46 <211> LENGTH: 8  
 47 <212> TYPE: PRT  
 48 <213> ORGANISM: Artificial Sequence  
 50 <220> FEATURE:  
 51 <223> OTHER INFORMATION: Based on Homo sapiens  
 W--> 53 <221> NAME/KEY: VARIANT  
 54 <222> LOCATION: (1)...(8)  
 55 <223> OTHER INFORMATION: Xaa=any amino acid except Cys  
 W--> 57 <400> 2  
 W--> 58 Cys Xaa Xaa Xaa Xaa Xaa Cys  
 59 1 5  
 62 <210> SEQ ID NO: 3  
 63 <211> LENGTH: 6  
 64 <212> TYPE: PRT  
 65 <213> ORGANISM: Artificial Sequence  
 67 <220> FEATURE:

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68 <223> OTHER INFORMATION: Based on Homo sapiens
W--> 70 <221> NAME/KEY: VARIANT
71 <222> LOCATION: (1)...(6)
72 <223> OTHER INFORMATION: Xaa=any amino acid except Cys
W--> 74 <400> 3
W--> 75 Xaa Xaa Xaa Xaa Xaa Xaa
76 1 5
79 <210> SEQ ID NO: 4
80 <211> LENGTH: 13
81 <212> TYPE: PRT
82 <213> ORGANISM: Artificial Sequence
84 <220> FEATURE:
85 <223> OTHER INFORMATION: Based on Homo sapiens
W--> 87 <221> NAME/KEY: VARIANT
88 <222> LOCATION: (1)...(13)
89 <223> OTHER INFORMATION: Xaa=any amino acid except Cys
W--> 91 <400> 4
W--> 92 Cys Xaa Xaa Xaa Xaa Xaa Cys Xaa Xaa Xaa Xaa Cys
93 1 5 10
96 <210> SEQ ID NO: 5
97 <211> LENGTH: 7
98 <212> TYPE: PRT
99 <213> ORGANISM: Artificial Sequence
101 <220> FEATURE:
102 <223> OTHER INFORMATION: Based on Homo sapiens
W--> 104 <221> NAME/KEY: VARIANT
105 <222> LOCATION: (1)...(7)
106 <223> OTHER INFORMATION: Xaa=any amino acid except Cys
W--> 108 <400> 5
W--> 109 Cys Xaa Xaa Xaa Xaa Xaa Cys
110 1 5
113 <210> SEQ ID NO: 6
114 <211> LENGTH: 13
115 <212> TYPE: PRT
116 <213> ORGANISM: Artificial Sequence
118 <220> FEATURE:
119 <223> OTHER INFORMATION: Based on Homo sapiens
W--> 121 <221> NAME/KEY: VARIANT
122 <222> LOCATION: (2)...(6)
123 <223> OTHER INFORMATION: Xaa=any amino acid except Cys or Tyr
W--> 125 <221> VARIANT
126 <222> LOCATION: (8)...(12)
127 <223> OTHER INFORMATION: Xaa=any amino acid except Cys or Tyr
W--> 129 <221> MOD_RES
130 <222> LOCATION: 1
131 <223> OTHER INFORMATION: Xaa=acetylated Tyrosine
W--> 133 <400> 6
W--> 134 Xaa Xaa Xaa Xaa Xaa Xaa Tyr Xaa Xaa Xaa Xaa Tyr
135 1 5 10

```

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138 <210> SEQ ID NO: 7
139 <211> LENGTH: 5
140 <212> TYPE: PRT
141 <213> ORGANISM: Artificial Sequence
143 <220> FEATURE:
144 <223> OTHER INFORMATION: Based on Homo sapiens
W--> 146 <221> NAME/KEY: VARIANT
147 <222> LOCATION: (1)...(5)
148 <223> OTHER INFORMATION: Xaa=any amino acid except Cys or Tyr
W--> 150 <400> 7
W--> 151 Xaa Xaa Xaa Xaa Xaa
152 1 5
155 <210> SEQ ID NO: 8
156 <211> LENGTH: 6
157 <212> TYPE: PRT
158 <213> ORGANISM: Artificial Sequence
160 <220> FEATURE:
161 <223> OTHER INFORMATION: Based on Homo sapiens
163 <400> SEQUENCE: 8
164 Gly Pro Arg Val Val Glu
165 1 5
168 <210> SEQ ID NO: 9
169 <211> LENGTH: 6
170 <212> TYPE: PRT
171 <213> ORGANISM: Artificial Sequence
173 <220> FEATURE:
174 <223> OTHER INFORMATION: Based on Homo sapiens
176 <400> SEQUENCE: 9
177 Asn Asn Arg Asp Asn Thr
178 1 5
181 <210> SEQ ID NO: 10
182 <211> LENGTH: 6
183 <212> TYPE: PRT
184 <213> ORGANISM: Artificial Sequence
186 <220> FEATURE:
187 <223> OTHER INFORMATION: Based on Homo sapiens
189 <400> SEQUENCE: 10
190 Tyr Asn Arg Val Ser Glu
191 1 5
194 <210> SEQ ID NO: 11
195 <211> LENGTH: 6
196 <212> TYPE: PRT
197 <213> ORGANISM: Artificial Sequence
199 <220> FEATURE:
200 <223> OTHER INFORMATION: Based on Homo sapiens
202 <400> SEQUENCE: 11
203 Gln Met Arg Met Glu Leu
204 1 5
207 <210> SEQ ID NO: 12

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## RAW SEQUENCE LISTING

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Input Set : A:\50154.003001.SEQLIST.TXT  
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208 <211> LENGTH: 6  
209 <212> TYPE: PRT  
210 <213> ORGANISM: Artificial Sequence  
212 <220> FEATURE:  
213 <223> OTHER INFORMATION: Based on Homo sapiens  
215 <400> SEQUENCE: 12  
216 Gly Phe Arg His Arg His  
217 1 5  
220 <210> SEQ ID NO: 13  
221 <211> LENGTH: 6  
222 <212> TYPE: PRT  
223 <213> ORGANISM: Artificial Sequence  
225 <220> FEATURE:  
226 <223> OTHER INFORMATION: Based on Homo sapiens  
228 <400> SEQUENCE: 13  
229 Gly Tyr Arg Ala Arg Pro  
230 1 5  
233 <210> SEQ ID NO: 14  
234 <211> LENGTH: 6  
235 <212> TYPE: PRT  
236 <213> ORGANISM: Artificial Sequence  
238 <220> FEATURE:  
239 <223> OTHER INFORMATION: Based on Homo sapiens  
241 <400> SEQUENCE: 14  
242 Tyr Gln Lys Asn Asn Lys  
243 1 5  
246 <210> SEQ ID NO: 15  
247 <211> LENGTH: 6  
248 <212> TYPE: PRT  
249 <213> ORGANISM: Artificial Sequence  
251 <220> FEATURE:  
252 <223> OTHER INFORMATION: Based on Homo sapiens  
254 <400> SEQUENCE: 15  
255 Leu Ile Lys Met Lys Pro  
256 1 5  
259 <210> SEQ ID NO: 16  
260 <211> LENGTH: 6  
261 <212> TYPE: PRT  
262 <213> ORGANISM: Artificial Sequence  
264 <220> FEATURE:  
265 <223> OTHER INFORMATION: Based on Homo sapiens  
267 <400> SEQUENCE: 16  
268 Asn Phe Lys Ser Gln Leu  
269 1 5  
272 <210> SEQ ID NO: 17  
273 <211> LENGTH: 6  
274 <212> TYPE: PRT  
275 <213> ORGANISM: Artificial Sequence  
277 <220> FEATURE:

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Input Set : A:\50154.003001.SEQLIST.TXT  
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278 <223> OTHER INFORMATION: Based on Homo sapiens  
280 <400> SEQUENCE: 17  
281 Glu Trp Lys Ala Leu Thr  
282 1 5  
285 <210> SEQ ID NO: 18  
286 <211> LENGTH: 6  
287 <212> TYPE: PRT  
288 <213> ORGANISM: Artificial Sequence  
290 <220> FEATURE:  
291 <223> OTHER INFORMATION: Based on Homo sapiens  
293 <400> SEQUENCE: 18  
294 Ser Tyr Lys Met Ala Asp  
295 1 5  
298 <210> SEQ ID NO: 19  
299 <211> LENGTH: 6  
300 <212> TYPE: PRT  
301 <213> ORGANISM: Artificial Sequence  
303 <220> FEATURE:  
304 <223> OTHER INFORMATION: Based on Homo sapiens  
306 <400> SEQUENCE: 19  
307 Thr Gln Lys Lys Val Glu  
308 1 5  
311 <210> SEQ ID NO: 20  
312 <211> LENGTH: 6  
313 <212> TYPE: PRT  
314 <213> ORGANISM: Artificial Sequence  
316 <220> FEATURE:  
317 <223> OTHER INFORMATION: Based on Homo sapiens  
319 <400> SEQUENCE: 20  
320 Arg Gln Lys Gln Val Lys  
321 1 5  
324 <210> SEQ ID NO: 21  
325 <211> LENGTH: 6  
326 <212> TYPE: PRT  
327 <213> ORGANISM: Artificial Sequence  
329 <220> FEATURE:  
330 <223> OTHER INFORMATION: Based on Homo sapiens  
332 <400> SEQUENCE: 21  
333 Gln Val Lys Asp Asn Glu  
334 1 5  
337 <210> SEQ ID NO: 22  
338 <211> LENGTH: 6  
339 <212> TYPE: PRT  
340 <213> ORGANISM: Artificial Sequence  
342 <220> FEATURE:  
343 <223> OTHER INFORMATION: Based on Homo sapiens  
345 <400> SEQUENCE: 22  
346 Leu Ile Lys Ala Ile Gln  
347 1 5

RAW SEQUENCE LISTING ERROR SUMMARY  
PATENT APPLICATION: US/09/586,937

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TIME: 15:04:11

Input Set : A:\50154.003001.SEQLIST.TXT  
Output Set: N:\CRF3\08212002\I586937.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:1; Xaa Pos. 3,4,5,6,7,8  
Seq#:2; Xaa Pos. 2,3,4,5,6,7  
Seq#:3; Xaa Pos. 1,2,3,4,5,6  
Seq#:4; Xaa Pos. 2,3,4,5,6,8,9,10,11,12  
Seq#:5; Xaa Pos. 2,3,4,5,6  
Seq#:6; Xaa Pos. 1,2,3,4,5,6,8,9,10,11,12  
Seq#:7; Xaa Pos. 1,2,3,4,5  
Seq#:49; Xaa Pos. 3  
Seq#:50; Xaa Pos. 1,2,3,4,5,6  
Seq#:55; Xaa Pos. 2  
Seq#:62; Xaa Pos. 1  
Seq#:71; Xaa Pos. 5  
Seq#:72; Xaa Pos. 1,2,3,4

## VERIFICATION SUMMARY

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Input Set : A:\50154.003001.SEQLIST.TXT

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L:36 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:40 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:1  
L:41 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:0  
L:53 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:57 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:2  
L:58 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:0  
L:70 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:74 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:3  
L:75 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:0  
L:87 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:91 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:4  
L:92 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:0  
L:104 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:108 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:5  
L:109 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:0  
L:121 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:125 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:6  
L:129 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:6  
L:133 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:6  
L:134 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:0  
L:146 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:150 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:7  
L:151 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:0  
L:682 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:686 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:49  
L:687 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:49 after pos.:0  
L:699 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:703 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:50  
L:707 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:50  
L:708 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:50 after pos.:0  
L:778 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:782 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:55  
L:783 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:55 after pos.:0  
L:873 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:877 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:62  
L:878 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:62 after pos.:0  
L:1017 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:1021 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:71  
L:1022 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:71 after pos.:0  
L:1036 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:1040 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:72  
L:1041 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:72 after pos.:0